

REMARKS

Status of Application

Claims 1, 2 and 4-14 are the claims that have been examined in the application. Claim 7 is objected to because of informalities. Claims 1, 5 and 7-8 are rejected under 35 U.S.C. § 102(b) as being anticipated by newly cited Degani et al., US Patent 5,125,560. Claim 2 is rejected under 35 U.S.C. § 102(b) as being anticipated by newly cited Desai et al., US Patent 5,170,931. Claim 2 is rejected under 35 U.S.C. § 102(b) as being anticipated by newly cited Miyajima, JP 05-109977. Claims 2, 9-12 and 14 are rejected under 35 U.S.C. § 102(e) as being anticipated by Jairazbhoy et al., US Publication 2002/0000331 A1. Claims 1 and 5-8 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Soga et al., US Publication 2006/0061974 A1, as evidenced by Jochym. Claim 4 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Soga et al., US Publication 2006/0061974 A1, as applied to claim 1, and further in view of Jairazbhoy et al., US Publication 2002/0000331 A1. Claim 13 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Jairazbhoy et al., US Publication 2002/0000331 A1, as applied to claim 2, and further in view of Soga et al., US Publication 2006/0061974 A1.

By this Amendment, Applicants hereby amend claim 2 and cancel claims 1 and 4-8.

Claim Objections

Claim 7 is objected to because of informalities. In line 1, “he” should be replaced with -the--.

Claim 7 is hereby canceled. Withdrawal of the objection is thus respectfully requested.

Claim Rejections - 35 U.S.C. § 102

Claims 1, 5 and 7-8 are rejected under 35 U.S.C. § 102(b) as being anticipated by Degani et al., US Patent 5,125,560.

Claims 1, 5 and 7-8 are hereby canceled, rendering the instant rejection moot.

Withdrawal of the instant rejection is thus respectfully requested.

Claim 2 is rejected under 35 U.S.C. § 102(b) as being anticipated by Desai et al., US Patent 5,170,931.

Claim 2 recites, in part, “applying heat to the substrate and pressure to the bonded element.” The Examiner alleges that Desai discloses each of the elements of claim 2. Applicants respectfully disagree.

Desai discloses a method for mounting a flexible film onto a substrate. Desai indicates that thermal compression bonding may be used to mount the flexible film. However, Desai does not indicate the nature of the thermal compression bonding, and fails to disclose that heat is applied to the substrate, while pressure is applied to the bonded element. As seen in col. 3, lines 1-14, Desai indicates that heat is applied to the solder, followed by pressure being applied. Therefore, Desai cannot disclose all of the elements of claim 2, and claim 2 is patentable over the applied art.

Claim 2 is rejected under 35 U.S.C. § 102(b) as being anticipated by Miyajima, JP 05-109977.

Claim 2 recites, in part, “applying heat to the substrate and pressure to the bonded element.” The Examiner alleges that JP 05-109977 discloses each of the elements of claim 2. Applicants respectfully disagree.

JP ‘977 discloses a semi-conductor device that is created by thermo-compression bonding, according to paragraph [0013]. Paragraph [0013] further discloses that pressure from a

mold press is applied at near room temperature, after thermo-compression bonding is performed. However, JP '977 fails to disclose that heat is applied to a substrate, while pressure is applied to a bonded element.

Claims 2, 9-12 and 14 are rejected under 35 U.S.C. § 102(e) as being anticipated by Jairazbhoy et al., US Publication 2002/0000331 A1.

The Examiner has provided substantively the same rejection in the instant Office Action as was provided in the Office Action dated January 18, 2008. Therefore, the following comments will be directed toward the Response to Arguments found on pages 8 and 9 of the instant Office Action.

In response to the argument that element 99 cannot be “in a pattern on a bonded element”, the Examiner alleges that element 98 (see FIG. 12) corresponds to the recited “bonded element”, and thus, element 99 corresponds to the recited “second bonding metal.” The Examiner further argues that given its broadest possible interpretation, that the solder joints 99 are arranged in a pattern on bonded element 98.

Applicants hereby amend claim 2 to recite “wherein the first plurality of metal bonding film shapes and the second plurality of metal bonding film shapes are each disposed in patterns on the substrate and bonded element, respectively, prior to the application of heat to the substrate and pressure to the bonded element.” The solder joints 99 are formed *after* the body portion 98 is oriented and mounted. See paragraph [0043]. Therefore, if the pattern disposed on the bonded element is formed *prior* to the application of heat and pressure, as recited in proposed amended claim 2, then amended claim 2 is patentable over the applied art.

Claims 9-12 and 14 are patentable at least by virtue of their dependency from proposed amended claim 2.

Claim Rejections - 35 U.S.C. § 103

Claims 1 and 5-8 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Soga et al., US Publication 2006/0061974 A1, as evidenced by Jochym.

Claims 1, 5 -8 are hereby canceled, rendering the instant rejection moot. Withdrawal of the instant rejection is thus respectfully requested.

Claim 4 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Soga et al., US Publication 2006/0061974 A1, as applied to claim 1, and further in view of Jairazbhoy et al., US Publication 2002/0000331 A1.

Claim 4 is hereby canceled, rendering the instant rejection moot. Withdrawal of the instant rejection is thus respectfully requested.

Claim 13 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Jairazbhoy et al., US Publication 2002/0000331 A1, as applied to claim 2, and further in view of Soga et al., US Publication 2006/0061974 A1.

Claim 13 is dependent from claim 2. Because Jairazbhoy fails to disclose all of the elements of claim 2, and because Soga fails to cure the deficient disclosure of Jairazbhoy, claim 13 is patentable over the applied art.

Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the

Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

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